Object Identifier	Main	Requirement	TDD Block
SLAM_FRD-2402	SOF # Functional Title Statement of Function		
SLAM_FRD-2403	01-01 JMPS Management The system shall support mission planning for SLAM and SLAM ER with Automatic Target Acquisition.	Requirement	[3.7.1]
SLAM_FRD-2404	01-01 JMPS Management "The system shall allow all data necessary for mission planning to be entered and/or retrieved, arranged and/or manipulated using the SLAM UPC and JMPS ""core"" software."	Requirement	[3.7.1]
SLAM_FRD-2405	01-01 JMPS Management "The system shall perform the majority of the processing tasks, including tactical database management, display management, aircraft mission planning, avionics, generic weapons, environment, communications, products and system functions."	Requirement	[2] [3] [4] [5] [6] [7]
SLAM_FRD-2406	01-01 JMPS Management "The system shall provide GPS cryptographic keys. Keys are defined as: red key format, weekly keys, black key format and Black Key Algorithm Update Parameter (BKUPD). The BKUPD is required to be reinitialized once per year, or if the missile isn't used that often, at the first use after a year (each update supercedes all previous updates). "	Requirement	[3.3.2.4.1]
SLAM_FRD-2407	01-01 JMPS Management "The system shall be perform a validity check of the GPS cryptographic keys, prior to loading into the system, to insure that the correct keys are available."	Requirement	[3.3.2.4.1]
SLAM_FRD-2408	01-01 JMPS Management The system shall be responsible for the handling and management of GPS cryptographic keys.	Requirement	[3.3.2.4.1]
SLAM_FRD-2409	01-01 JMPS Management "The system shall support the download of GPS cryptographic keys, GPS Almanac, and SLAM mission data files to memory and storage data transfer devices for subsequent transfer to the SLAM weapon."	Requirement	[3.3.2.4.1] [3.10.1]

SLAM_FRD-2410	01-01 JMPS Management "The system shall provide multiple key types (e.g. red, black, etc) concurrently within the system."		
SLAM_FRD-2411	01-01 JMPS Management The system shall allow all loaded key types to be selectable and usable by the UPC's for downloading.		
SLAM_FRD-2412	01-01 JMPS Management The system shall provide at least two weeks of keys at all times to be defined as current and next.		
SLAM_FRD-2413	01-01 JMPS Management JMPS shall define the system hardware for use by the SLAM UPC.		
SLAM_FRD-2414	01-01 JMPS Management "JMPS shall define the system software, the software configuration, the style guides, graphical user interfaces , and the windowing system to be used by the SLAM UPC. "		
SLAM_FRD-2415	01-01 JMPS Management The system shall comply with the Defense Information Technology Security Certification and Accreditation Process (DITSCAP) requirements.		
SLAM_FRD-2416	01-01 JMPS Management "The system shall provide System Administration Support, capable of controlling the following functions (at a minimum): a) assignment of SLAM data base access privileges to JMPS accounts; b) listing and printing of all SLAM accounts and their access privileges; c) assignment of read only, read/write, or no access protection to a stored mission plan; d) specification of the classification banner for the various menus and reports generated by the DBA module, and; e) transfer of mission to/from various storage media (e.g., 3-1/2 inch disk, etc.)."		
SLAM_FRD-2417	01-01 JMPS Management The system shall provide security functions ensuring that SLAM missions can not be deleted or modified by other UPC operators.	Requirement	[7.2.2]
SLAM_FRD-2418	01-01 JMPS Management The system	Requirement	[7.2.2]

		shall maintain a record of valid system operators and individual passwords for each operator.		
SLAM_FRD-2419		01-01 JMPS Management "The system shall not permit access to any data, programs, or functions which reside on JMPS hardware until the operator enters a valid user name and password. "	Requirement	[7.2.2]
SLAM_FRD-2420		01-01 JMPS Management The system shall protect the passwords for existing user accounts from disclosure to any unauthorized user.	Requirement	[7.2.2]
SLAM_FRD-2421		01-01 JMPS Management "The system shall display the user selected format and geodetic system for all coordinate system data (launch locations, target locations, waypoints, etc.) for both input and output. "	Requirement	[7.1.3.1]
SLAM_FRD-2422		01-02 JMPS Interfaces "The systems shall support the electronic retrieval of support data such as GPS almanac, current weather information, imagery, imagery products, mission target folders, ATO, cryptographic keys, and etc."	Requirement	[2.1.1]
SLAM_FRD-2423		01-02 JMPS Interfaces "The systems shall support the manual retrieval (via 3-1/2 inch floppy, tapes, etc) of data such as: GPS almanac, imagery, imagery products, mission target folders, and etc."		
SLAM_FRD-2424		01-02 JMPS Interfaces "The system is required to verify the accuracy of all electronic or manually entered mission critical data received through external interfaces. Examples of mission critical data are: GPS almanac, cryptographic key, atmospheric (winds, temperatures, humidity etc.), characteristics of threats, any data used to define coordinates for targets or threats, and imagery. "	Requirement	[2.1.3.4]
SLAM_FRD-2425		01-02 JMPS Interfaces The system shall provide a tool for the SLAM UPC to support generation of graphical 3D perspective views of the target area from an operator-specified axis and location showing the terrain data and cultural features.	Requirement	[3.9.3.1]

SLAM_FRD-2426	01-02 JMPS Interfaces The system shall provide access to utilities or networked systems that generate 3D perspectives of the target area such as the Navy's TOPSCENE utility.	Requirement	[3.9.3.1]
SLAM_FRD-2427	01-02 JMPS Interfaces "The system shall interface with external storage media (3-1/2 inch disk, CD-ROM, 8mm tape, etc) in order to retrieve, archive, save, or restore data."		
SLAM_FRD-2428	01-02 JMPS Interfaces "The system shall support the SLAM UPC internal and external interfaces, including data definition, processing transfer, and display."		
SLAM_FRD-2429	01-02 JMPS Interfaces The system shall provide a Threat System Analysis Module (TSAM) equivalent to or better than the TAMPS 5.2 TSAM.		
SLAM_FRD-2430	01-02 JMPS Interfaces The system shall support the capability to write reports and graphic files to a PC formatted disk .		
SLAM_FRD-2431	01-02 JMPS Interfaces The system shall provide for Radar Terrain Masking with 90% accuracy relative to ground truth.		
SLAM_FRD-2432	01-02 JMPS Interfaces "The system shall provide the Radar Terrain Masking results in less than 30 seconds for each threat within in a 50 mile radius, in less than 90 seconds for each threat within in a 100 mile radius, and in less than 180 seconds for each threat within in a 200 mile radius."		
SLAM_FRD-2433	01-02 JMPS Interfaces "The system shall verify the contents of the data transfer device (MU, AMU, etc) to ascertain that all appropriate data (SLAM tagset, GPS Almanac and cryptographic keys) is downloaded. "		
SLAM_FRD-2434	01-03 Data Base Management "The system shall provide DBA functions for threat, target, map/chart, GPS and DTED database creation, modification and deletion"		

SLAM_FRD-2435	01-03 Data Base Management "The system shall allow the SLAM UPC to retrieve existing information from the JMPS Common Data Base. This information shall include DTED records, DTED header information, data used in processing threat density updates, GPS Almanac data, weather, imagery, imagery products, charts, mission target folders, cultural features, ATOs, and etc."		
SLAM_FRD-2436	01-03 Data Base Management "The system shall be capable of providing the various levels and types of DTED (e.g. Level I, Level II, STRM, etc.)."		
SLAM_FRD-2437	01-03 Data Base Management "The system shall have the capability to automatically or manually load, update, access backup, transfer, save and delete Digital Terrain Elevation Data (DTED) and charts."		
SLAM_FRD-2438	01-03 Data Base Management The system shall allow for the manual addition of water pages. Water pages shall not be allowed to overwrite NIMA DTED data.		
SLAM_FRD-2439	01-03 Data Base Management The system shall be capable of supporting expansion of cultural feature data as more becomes available.		
SLAM_FRD-2440	01-03 Data Base Management "The system shall have the capability to automatically or manually load, update, access backup, transfer, save and delete Cultural Features"		
SLAM_FRD-2441	01-03 Data Base Management The system shall be capable of supporting national imagery in a standard format (e.g. NITF 2.0 or greater).		
SLAM_FRD-2442	01-03 Data Base Management "The system shall support various imagery formats (national, SAR, tactical, etc.)"		
SLAM_FRD-2443	01-03 Data Base Management "The system shall have the capability to automatically or manually load, update, access backup, transfer, save and delete imagery products"		

SLAM_FRD-2444	01-04 Graphics Display "The system shall provide the operator with windows, menus, selection lists, and buttons, where practical, to reduce operator error and increase operator productivity. "	Requirement	[7.1.4]
SLAM_FRD-2445	01-04 Graphics Display "The system shall provide the capability to pan up, down, left or right or zoom out at a selectable scale (1.5, 2, 3, etc) during route construction."	Requirement	[7.3]
SLAM_FRD-2446	01-05 On-line Help The system shall provide for On-line Help to include appropriate documentation and graphics. The On-line Help will provide text based and audio/video information and instruction that will assist personnel in planning a SLAM UPC mission.	Requirement	[7.3.3]
SLAM_FRD-2447	01-05 On-line Help "The system shall be capable of periodically updating On-line Help, independent of JMPS or UPC upgrades"	Requirement	[7.3.3]
SLAM_FRD-2448	01-06 Operator Interface/ Usability The system shall allow the operator to save complete or incomplete missions	Requirement	[7.1.5.1]
SLAM_FRD-2449	01-06 Operator Interface/ Usability "The system shall provide, that upon exiting the system without saving the current session, the SLAM UPC shall query the operator on whether the current mission planning session should be saved or whether he wishes to cancel the exit. Selecting NO shall exit and abort the current session without saving data. Selecting YES shall save the current session and exit. Selecting CANCEL shall return the operator to the current mission planning session."		
SLAM_FRD-2450	01-06 Operator Interface/ Usability "The system shall allow the operator to save at least 300 complete mission files. Missions files can include: missions, tagsets, imagery, imagery products, target folders, and etc."		
SLAM_FRD-2451	01-07 Sensor Acquisition Range		

	Predictions The system shall provide an approved model for the Maverick IIR seeker in conjunction with the Electro-Optical Tactical Decision Aid (EOTDA)		
SLAM_FRD-2452	01-07 Sensor Acquisition Range Predictions The system shall provide for updates or enhancement to the IIR seeker model in conjunction with the Electro-Optical Tactical Decision Aid (EOTDA)		
SLAM_FRD-2453	01-07 Sensor Acquisition Range Predictions "The system shall accept input data for the EOTDA to include thermal characteristics of target and background, time of day, solar heating, atmospheric conditions and the type of target"		
SLAM_FRD-2454	01-07 Sensor Acquisition Range Predictions The system shall output EOTDA data in a graphical representation of the target appearance based on input conditions.		
SLAM_FRD-2455	02-01 SLAM Management "The SLAM UPC shall be developed using structured software engineering methods defined by the JMPS Software Development Kit, the JMPS Style Guide and MIL-STD-498. "		
SLAM_FRD-2456	02-01 SLAM Management The SLAM UPC shall comply with DII COE level 6.		
SLAM_FRD-2457	02-01 SLAM Management The SLAM UPC shall comply with the Defense Information Technology Security Certification and Accreditation Process (DITSCAP) requirements.		
SLAM_FRD-2458	02-01 SLAM Management The SLAM UPC shall make use of functions provided by JMPS and where appropriate request new functions.		
SLAM_FRD-2459	02-01 SLAM Management The SLAM UPC shall support new mission data loading methods and devices. This includes updates and modifications to existing interfaces with data preprocessors.		
SLAM_FRD-2460	02-01 SLAM Management The SLAM UPC shall make maximum use of the JMPS core software where possible to reduce the amount of software in the UPC.		

SLAM_FRD-2461	02-01 SLAM Management The SLAM UPC shall minimize the amount of machine dependent code to facilitate porting to other computer platforms		
SLAM_FRD-2462	02-01 SLAM Management The SLAM UPC shall interface with JMPS		
SLAM_FRD-2463	02-01 SLAM Management The SLAM UPC shall be capable of providing process management and resource allocation within the JMPS environment		
SLAM_FRD-2464	02-01 SLAM Management The SLAM UPC shall generate a Bulk Data File (BDF) for each tagset.		
SLAM_FRD-2465	02-01 SLAM Management "The SLAM UPC shall prepare the BDFs for handling by aircraft (F/A-18, P-3, S-3, etc) software, such as assigning tagsets to SLAM wing stations and assigning the data link channels. "		
SLAM_FRD-2466	02-01 SLAM Management "The SLAM UPC shall provide the planner with the option to screen for only desired imagery based on screening capabilities of the database being queried, such as image location, image collection attitude, GSD, image type (e.g., S4, reconnaissance), and image collection date and time."		
SLAM_FRD-2467	02-01 SLAM Management "The SLAM UPC shall provide or make available the following data along with related software algorithms in order to complete a mission plan: The SLAM mission planning data, including Global Positioning System (GPS) initialization point (baseline only), mission identification, target definition (ATA requires target imagery), environmental definition, route definition, threat analysis, launch point definition, vertical profile definition, weapon settings, control aircraft definition, GPS prediction and mission verification. "		
SLAM_FRD-2468	02-01 SLAM Management "The SLAM UPC shall be designed to accommodate both SLAM and SLAM ER OFS, which includes ATA capability."		

SLAM_FRD-2469	02-01 SLAM Management "The SLAM UPC shall be designed to allow for interfaces to new launch platforms such as F/A-18 E/F, P-3 and S-3."		
SLAM_FRD-2470	02-01 SLAM Management The SLAM UPC shall be designed to support missile upgrades.		
SLAM_FRD-2471	02-01 SLAM Management "The SLAM UPC shall be designed to support various levels and types of DTED (STRM, Level II), cultural features, and intelligence data (MIDB) as they becomes available or the format of the data changes"		
SLAM_FRD-2472	02-01 SLAM Management "The SLAM UPC shall be designed to support new mission data loading such as the Common Munitions Bit Reprogrammable Equipment (CMBRE), Advanced MU (AMU), and PCMCIA cards."		
SLAM_FRD-2473	02-01 SLAM Management "The SLAM UPC shall be designed to support Graphical User Interface (GUI) enhancements based on the JMPS Style Guide, SLAM OAG, NavMPS Fleet User Interface Working Group (FUIWG), and recommendations of the Guidance Software Mission Planning (GSMP) IPT."		
SLAM_FRD-2474	02-01 SLAM Management "The SLAM UPC shall be designed to support electronic retrieval of support data, such as GPS almanac, current weather information, ATO, imagery/image products, and target folders."		
SLAM_FRD-2475	02-01 SLAM Management The SLAM UPC shall encompass both the SLAM and SLAM ER with ATA mission planning modules under one generic SLAM UPC		
SLAM_FRD-2476	02-01 SLAM Management "The SLAM UPC shall provide access to the capabilities and displays required by the operator to plan, evaluate, organize and execute a tactical strike mission. This includes route development (i.e. GPS initialization point (SLAM), launch point, way points, seeker turn-on point, target unmasking point, estimated detection range,		

	minimum lock-on point, target impact, etc.), fuse delays, weapon data link antenna patterns, control aircraft placement, control aircraft data link antenna pattern and threat analysis"		
SLAM_FRD-2477	02-01 SLAM Management "The SLAM UPC shall make use of a ""checklist"" methodology."	Requirement	[3.9.5.1]
SLAM_FRD-2478	02-01 SLAM Management "The SLAM UPC ""checklist"" methodology shall result in the successful completion of tasks in the checklist and valid SLAM missions. The mission can then be tagged and downloaded to the SLAM and SLAM ER missiles or saved for downloading at a later time"		
SLAM_FRD-2479	02-01 SLAM Management "The SLAM UPC shall utilize interactive computer graphics which allows the planning, verification, and downloading of SLAM missions."		
SLAM_FRD-2480	02-01 SLAM Management "The SLAM UPC shall insure that all functions within the UPC shall maintain the necessary data integrity, accuracy, and reliability to ensure no mission failures occur because of UPC software errors."		
SLAM_FRD-2481	02-01 SLAM Management The SLAM UPC shall insure that all valid SLAM generated missions shall meet the requirements of the SLAM and SLAM ER System Specifications.		
SLAM_FRD-2482	02-01 SLAM Management The SLAM UPC shall perform an integrity check of imagery data (e.g. RPC header data) to prevent corrupted data from being used by the UPC.		
SLAM_FRD-2483	02-01 SLAM Management The SLAM UPC shall perform basic mission planning and route construction within the UPC.		
SLAM_FRD-2484	02-01 SLAM Management The SLAM UPC shall be invoked from the JMPS menu		
SLAM_FRD-2485	02-01 SLAM Management "The SLAM UPC shall allow a mission to begin by recalling complete or incomplete missions, or by creating new missions		

	and initializing basic mission parameters."		
SLAM_FRD-2486	02-01 SLAM Management "The SLAM UPC will provide the operator with the capability to display related items and formats including, but not limited to, screen classification, grid coordinate system, coordinate display format, and operational areas. Once defined the operator will be able to modify these selections at any time during the mission planning process. "		
SLAM_FRD-2487	02-01 SLAM Management "The SLAM UPC shall insure that all calculations internal to the UPC which utilize coordinates are done in the World Geodetic System 1984 (WGS-84), maintaining WGS-84 resolution and data integrity"		
SLAM_FRD-2488	02-01 SLAM Management The SLAM UPC shall not allow the operator to download an invalid mission to a missile		
SLAM_FRD-2489	02-01 SLAM Management "The SLAM UPC shall enable the user to select a SLAM missile flight path that is optimized for mission success in a threat environment, including missile, launch aircraft, and control aircraft survivability."		
SLAM_FRD-2490	02-01 SLAM Management The SLAM UPC shall utilize any imagery source that satisfies the ATR requirements.		
SLAM_FRD-2491	02-02 SLAM Interfaces "The SLAM UPC shall interface with JMPS Core to retrieve existing information from the JMPS Common Data Base. This information shall include DTED records, DTED header information, data used in processing threat density updates, GPS Almanac data, weather, imagery, imagery products, charts, mission target folders, cultural features, ATOs, and etc."		
SLAM_FRD-2492	02-02 SLAM Interfaces The SLAM UPC shall provide the operator with the capability of manually entering ATO information as a back up to electronic transfer of data.		

SLAM_FRD-2493	02-02 SLAM Interfaces The SLAM UPC shall perform operator interface and display functions		
SLAM_FRD-2494	02-02 SLAM Interfaces "The SLAM UPC shall obtain information from the JMPS common data bases that are generic to mission planning for any type of vehicle such as DTED, CADRG, imagery, weather data, Electro Optical Tactical Decision Aid, MIDB, and GPS almanac."		
SLAM_FRD-2495	02-02 SLAM Interfaces "The SLAM UPC shall interface with other UPC's within the JMPS framework to support SLAM mission requirements, such as providing launch point data to an aircraft UPC."		
SLAM_FRD-2496	02-02 SLAM Interfaces The SLAM UPC shall interface with the SLAM private data bases to read and write information required to support SLAM mission planning capabilities		
SLAM_FRD-2497	02-02 SLAM Interfaces The SLAM UPC shall interface with JMPS provided tools for processing and downloading tagsets to data storage and transfer devices such as the F/A-18 MU and AMU. These devices are used for transferring the tagsets to the SLAM weapon through aircraft interfaces.		
SLAM_FRD-2498	02-02 SLAM Interfaces The SLAM UPC shall be capable of accessing networked imagery databases such as JSIPS-N and IPL.		
SLAM_FRD-2499	02-02 SLAM Interfaces The SLAM UPC shall be capable of accepting electronically passed ATO data.		
SLAM_FRD-2500	02-02 SLAM Interfaces "The SLAM UPC shall be capable of receiving electronically passed imagery, imagery products, and mission target folder."		
SLAM_FRD-2501	02-02 SLAM Interfaces "The SLAM UPC shall be capable of receiving imagery, imagery products, and mission target folders via external media (3-1/2 inch disk, CD-ROM, 8-mm tape, etc.)."		
SLAM_FRD-2502	02-02 SLAM Interfaces The SLAM UPC shall interface with the F/A-18		

	preprocessor to provide the necessary mission data for a SLAM BDF.		
SLAM_FRD-2503	02-02 SLAM Interfaces "The SLAM UPC shall interface with aircraft download processes which will provide the necessary means of gathering and collating appropriate data (SLAM tagset, GPS Almanac and Keys) for download to an appropriate data transfer device (MU, AMU, etc.)."		
SLAM_FRD-2504	02-02 SLAM Interfaces "The SLAM UPC shall interface with external storage media (3-1/2 inch disks, CD-ROM, etc) in order to archive, save, or restore data "		
SLAM_FRD-2505	02-02 SLAM Interfaces The SLAM UPC shall be capable of writing report files to a 3-1/2 inch disk in PC compatible format.		
SLAM_FRD-2506	02-02 SLAM Interfaces The SLAM UPC shall support importing of cultural features data from the Digital Imagery Work Station (DIWS) or system with similar databases.		
SLAM_FRD-2507	02-02 SLAM Interfaces The SLAM UPC shall utilize the Radar Terrain Masking Algorithm provided by JMPS.		
SLAM_FRD-2508	02-02 SLAM Interfaces The SLAM UPC shall provide the operator with the option of using or disregarding the Radar Terrain Masking effects.		
SLAM_FRD-2509	02-03 Data Base Management "The SLAM UPC shall allow a designated operator, called the Data Base Administrator, to update and maintain the SLAM unique data bases. "		
SLAM_FRD-2510	02-03 Data Base Management "The SLAM UPC DBA shall be comprised of three major functional requirements categories: SLAM Air Vehicle Data Functions, Report Functions, and Security Operations Functions."		
SLAM_FRD-2511	02-03 Data Base Management "The SLAM UPC shall provide creation, modification and deletion functions for the SLAM Private Data base files."		

SLAM_FRD-2512	02-03 Data Base Management The SLAM UPC shall prevent unauthorized modification of the mission data file within the SLAM Private Data Base by validating the current operator's username and password entries.		
SLAM_FRD-2513	02-03 Data Base Management "The SLAM UPC shall ensure that all mission data, in reports or the SLAM mission load device, is accurate and will not cause mission failure and/or catastrophic effects due to software anomalies within the UPC."		
SLAM_FRD-2514	02-03 Data Base Management The SLAM UPC shall interface with the SLAM Private Data Base to retrieve existing data base records and write updated or new data base records		
SLAM_FRD-2515	02-03 Data Base Management "The SLAM UPC shall allow the SLAM DBA to manipulate and/or update data that pertains to SLAM unique flight characteristics, if required by the design of the UPC. "		
SLAM_FRD-2516	02-03 Data Base Management "The SLAM UPC shall allow the SLAM DBA to manipulate and/or update SLAM unique flight characteristics data by an external device (floppy drive, tape drive, etc.)"		
SLAM_FRD-2517	02-03 Data Base Management "The SLAM UPC shall allow multiple versions of the SLAM MSV if necessary (either through multiple FFS routines, modification of the database and/or both), and may include the following data items: a) changes to air vehicle flight performance parameters (e.g. day type performance of different SLAM configurations, etc); and b) new or revised threat analysis data tables."		
SLAM_FRD-2518	02-03 Data Base Management "The SLAM UPC DBA shall have the capability to generate, review, and print listings of various data base files to include: a) a list of missions stored in the data base, and b) a list of Air Vehicle flight parameter values."		
SLAM_FRD-2519	02-03 Data Base Management "The SLAM		

	UPC shall be capable of accessing and retrieving weather data provided by JMPS databases. This includes temperature, humidity, wind speed and direction, and minimum cloud level for the entire flight path."		
SLAM_FRD-2520	02-03 Data Base Management The SLAM UPC shall utilize the weather data provided by JMPS to analyze the flight performance of the missile.		
SLAM_FRD-2521	02-03 Data Base Management The SLAM UPS shall analyze current target/launch and flight path weather information and identify icing conditions.		
SLAM_FRD-2522	02-03 Data Base Management The SLAM UPC shall display a warning message indicating that icing conditions are present at launch or during flight and that the probe heater should be turned on.		
SLAM_FRD-2523	02-04 Graphics Display "The SLAM UPC shall support Graphical User Interface enhancements based on JMPS Style Guide, SLAM OAG, JMPS FUIWG and recommendations by the GSMP IPT. "		
SLAM_FRD-2524	02-04 Graphics Display The SLAM UPC will provide a consistent and user friendly interface that will minimize the operator training time and mission planning time.		
SLAM_FRD-2525	02-04 Graphics Display The SLAM UPC will incorporate the JMPS style guide and/or design guides applicable to the JMPS system.		
SLAM_FRD-2526	02-04 Graphics Display The SLAM UPC shall provide graphics functions to allow the operator to manipulate and display various geographic features and other mission planning decision aids.		
SLAM_FRD-2527	02-04 Graphics Display The SLAM UPC shall insure the graphics functions will remain available and selections may be modified at any time during the mission planning process.		
SLAM_FRD-2528	02-05 On-line Help The SLAM UPC shall support On-Line Help.		

SLAM_FRD-2529	02-05 On-line Help "The SLAM UPC On-Line Help shall include appropriate documentation and graphics from the SLAM Technical Operations Manual (STORM), Mission Planning Instructions (MPI), and other documentation approved by the GSMP IPT."		
SLAM_FRD-2530	02-06 Operator Interface/ Usability "The SLAM UPC shall provide the operator the capability to recall a subset of missions based on common target, common launch location, etc."		
SLAM_FRD-2531	02-06 Operator Interface/ Usability "The SLAM UPC shall support the ability to cancel or abort any task or process initiated by the user. For example, all menus shall provide the ability to cancel out of the menu discarding any data entered."		
SLAM_FRD-2532	02-06 Operator Interface/ Usability "The SLAM UPC shall allow a process initiated by the user to be canceled or killed. For example, if the user chooses to display DTED and is given an alert that it may take 10 minutes to process the DTED for display, after initiating the process, the operator should be able to kill or abort that process through selection of an Abort or Kill button."		
SLAM_FRD-2533	02-06 Operator Interface/ Usability The SLAM UPC shall allow the operators to store any planned mission which is owned by the operator.		
SLAM_FRD-2534	02-06 Operator Interface/ Usability "The SLAM UPC shall allow the operator to modify or delete only those missions owned by the operator and designated as editable at the time of storage (i.e. as a results of tagged editing, etc.)."		
SLAM_FRD-2535	02-06 Operator Interface/ Usability The SLAM UPC shall allow the operator to recall all missions or a subset of missions.		
SLAM_FRD-2536	02-06 Operator Interface/ Usability The SLAM UPC shall display a list of the recalled missions in either an alphanumeric and/or graphical		

	(horizontal) view format at the operator's option.		
SLAM_FRD-2537	02-07-01 Threats The SLAM UPC shall be capable of calculating an engagement scenario for SAM sites whose Maximum Effective Radius of Action (MERA) intersects or overlaps the planned mission route.		
SLAM_FRD-2538	02-07-01 Threats The SLAM UPC shall be begin the exposure when the mission route enters a MERA and terminates when the route exits the MERA; any single threat site may be analyzed for more than one exposure per engagement.		
SLAM_FRD-2539	02-07-01 Threats "THE SLAM UPC engagement scenario shall utilize information from the threat parameters file in the SLAM UPC private database and the following rules: a)) each exposure shall be analyzed independently from any other exposure, whether from the same site or a separate site; b) tactical (mobile) systems shall be considered to be in a fixed location for the purpose of calculating missile intercepts, probability of kill, time in view, and distance within range; c) before firing, a site must satisfy: 1)Reaction time, the length of time needed to detect a target and execute a missile firing sequence culminating in an actual launch, 2)Coast time, the length of time that a radar system can momentarily lose sight of a target and still effectively track it, and 3)Refire time, the length of time needed to determine that a missile intercept is unsuccessful and fire again; d) missile flyout time shall be considered in predicting intercept points; e) a SAM site shall take the first opportunity to fire that will result in a non zero probability of kill; f) a site shall refire as rapidly as possible; g) probability of kill shall be computed for all predicted intercept points without regard to missile availability limitations; and h) the overall probability of attrition for a site in a single engagement shall be limited by the number of salvos		

	available to the site and shall be computed using the intercepts with the highest individual probability of kill.		
SLAM_FRD-2540	02-07-02 Threat Degrade Effects "The SLAM UPC shall be capable, upon operator request, of applying operator entered degrade factors to the Threat Analysis results."		
SLAM_FRD-2541	02-07-02 Threat Degrade Effects "The SLAM UPC shall provide the operator with the capability of individually assigning threat degrades to each threat site, equally assigning threat degrades to all threat sites of the same type within a defined area, or equally assigning threat degrades to all threat sites of all types within a defined area."		
SLAM_FRD-2542	02-07-02 Threat Degrade Effects The SLAM UPC shall provide the operator with the option of specifying the area of threat degrades with the keyboard and/or the locator devices.		
SLAM_FRD-2543	02-07-03 GPS and Data Link Jammers The SLAM UPC GPS and Data Link Jamming Analysis shall provide a prediction of the effect of GPS and data link jamming on the weapon system.		
SLAM_FRD-2544	02-07-03 GPS and Data Link Jammers The SLAM UPC shall allow the operator to specify GPS/AWDL jamming threats in the target area.		
SLAM_FRD-2545	02-07-03 GPS and Data Link Jammers "The SLAM UPC shall provide the defined threat to include a reference number, location (either coordinates of range/bearing from the target), elevation (MSL), characteristics (frequency band, power, antenna characteristics) and a description."		
SLAM_FRD-2546	02-07-03 GPS and Data Link Jammers The SLAM UPC shall compute Radar Terrain Masks for operator specified altitudes for these threats.		
SLAM_FRD-2547	02-07-03 GPS and Data Link Jammers The SLAM UPC shall predict navigation performance in the presence of GPS jamming which shall be		

	incorporated in the mission analysis function.		
SLAM_FRD-2548	02-07-03 GPS and Data Link Jammers The SLAM UPC shall provide recommendations to the operator regarding maximum mission range and prelaunch GPS acquisition based on the GPS threat.		
SLAM_FRD-2549	02-07-03 GPS and Data Link Jammers The SLAM UPC Data Link Masking Analysis shall incorporate weapon data link performance in the presence of data link jamming threats.		
SLAM_FRD-2550	02-07-03 GPS and Data Link Jammers The SLAM UPC shall provide recommendations to the operator regarding terminal trajectory selection in the presence of GPS and data link jamming in the target area.		
SLAM_FRD-2551	02-07-04 Threat Analysis "The SLAM UPC Threat Analysis shall allow the operator to determine if the SLAM flights paths are optimized for survivability, i.e. probability of intercept by hostile forces."		
SLAM_FRD-2552	02-07-04 Threat Analysis "The SLAM UPC Threat Analysis shall use JMPS processing functions where feasible, as well as JMPS provided threat databases, e.g., MIDB."		
SLAM_FRD-2553	02-07-04 Threat Analysis The SLAM UPC Threat Analysis shall provide a computation of risk from the threat environment for each segment in the route.		
SLAM_FRD-2554	02-07-04 Threat Analysis "The SLAM UPC Threat Analysis shall account for Surface to Air (SAM), GPS, and Advanced Weapon Data Link (AWDL) jamming threats to SLAM."		
SLAM_FRD-2555	02-07-04 Threat Analysis The SLAM UPC Threat Analysis shall utilize the Threat System Analysis Module (TSAM) or similar module provided by JMPS.		
SLAM_FRD-2556	02-07-04 Threat Analysis "The SLAM TSAM shall employ vulnerability data modeled on SLAM specific RF (Radio		

	Frequency), IR (Infrared), acoustic, and visual signatures"		
SLAM_FRD-2557	02-07-04 Threat Analysis The SLAM TSAM shall provide a graphical display of the relative threat analysis/attrition probability and minimize operator interpretation of threat analysis results.		
SLAM_FRD-2558	02-07-04 Threat Analysis "The SLAM UPC Threat Analysis will evaluate threat data, using information from the JMPS Common and SLAM UPC private data bases, as it affects the missile's route. "		
SLAM_FRD-2559	02-07-04 Threat Analysis The SLAM UPC Threat Analysis shall examine a proposed missile route with respect to the hostile air defense environment at intervals no greater than one second.		
SLAM_FRD-2560	02-07-04 Threat Analysis The SLAM UPC Threat Analysis shall be capable of displaying the Maximum Effective Radius of Action (MERA) and threat density display (equivalent to TAMPS 5.2 functionality or better) for each threat.		
SLAM_FRD-2561	02-07-04 Threat Analysis "The SLAM UPC Threat Analysis results shall include an overall probability of success for the mission, a probability of attrition (PA) for each threat site encountered, a total time in view of each site, and the total distance flown by the missile within range of each site ."		
SLAM_FRD-2562	02-07-04 Threat Analysis The SLAM UPC Threat Analysis shall be disabled if no threat data is available or if no flight segments are defined.		
SLAM_FRD-2563	02-07-04 Threat Analysis "The SLAM UPC Threat Analysis shall be enabled when threat data is available and at least one flight segment is defined, thereby allowing the operator the option to optimize partial flight profiles."		
SLAM_FRD-2564	02-07-04 Threat Analysis The SLAM UPC Threat Analysis shall not be a		

	requirement limiting an operator from downloading a mission to a missile.		
SLAM_FRD-2565	02-07-05 Threat Graphics "The SLAM UPC shall be capable, upon operator request, of graphically displaying threat analysis results, either for a single site or for all threats, in the plan form (horizontal) and vertical viewing modes."		
SLAM_FRD-2566	02-07-05 Threat Graphics "The SLAM UPC Threat Analysis results shall be depicted, at a minimum, in a threat analysis display (the colors listed are for example only, distinguishing colors should be used): a) a unique, red threat sequence number by each SAM within missile/gun range of the mission route as determined by the site's MERA; b) a yellow highlight of the mission groundtrack with radar coverage and within the reaction time needed by a site to execute a missile/gun firing sequence resulting in an intercept within the MERA; c) a red highlight of the mission route within a missile envelope where an intercept is likely to occur; d) a magenta symbol indicating each point within a SAM's MERA where a missile intercept is predicted.		
SLAM_FRD-2567	"		
SLAM_FRD-2568	02-08-01 Route Development "The SLAM UPC shall plan a mission by defining launch point, target, missile flight path, and altitudes."		
SLAM_FRD-2569	02-08-01 Route Development "The SLAM UPC shall define the flight environment; e.g. outside air temperature (OAT), wind direction, wind speed for each segment, cloud ceiling, absolute and relative humidity, air temperature, and etc."		
SLAM_FRD-2570	02-08-01 Route Development "The SLAM UPC shall define the missile flight path; e.g. GPS initialization point (SLAM), target definition, terminal segment definition, waypoint definition and launch point definition."		
SLAM_FRD-2571	02-08-01 Route Development "The SLAM		

	UPC shall define the prediction of missile performance including SLAM air vehicle flight performance; e.g. Time of Flight, Time to Video, maneuvering capabilities, terrain clobber avoidance, target masking (due to terrain and cultural features), predicted detection range of the SLAM seeker, GPS satellite availability, as well as where there is adequate communication between the control aircraft and missile weapon data link."		
SLAM_FRD-2572	02-08-01 Route Development "The SLAM UPC shall define the launch conditions and the control segment; e.g. temperature, altitude, winds, time of launch, position uncertainty, GPS acquisition at launch, and etc."		
SLAM_FRD-2573	02-08-01 Route Development "The SLAM UPC shall perform target definition for SLAM and Non-ATA SLAM ER by selecting a target from a target database, like MIDB. "		
SLAM_FRD-2574	02-08-01 Route Development "The SLAM UPC shall perform target definition for SLAM ER ATA functionality by providing the user with image selection and management for target identification. Through either 8-mm magnetic tape or a network interface to imagery databases (e.g. JSIPS-N, Image Product Library, etc.), National Asset S4 imagery with Rapid Positioning Coefficients (RPCs) are queried and selected for use in-flight for target acquisition and terminal missile guidance. "		
SLAM_FRD-2575	02-08-02 Route Planning The SLAM UPC Route Planning functions shall provide the capability to define the mission by establishing initial conditions to be used for route development.		
SLAM_FRD-2576	02-08-02 Route Planning "The SLAM UPC Route Planning functions shall include the capability to optionally specify launch location coordinates and launch airspeed, winds aloft (speed and direction at altitude intervals) for each route segment, or define control aircraft flight profile."		

SLAM_FRD-2577	02-08-02 Route Planning "The SLAM UPC shall provide the operator with the option to display/identify targets that are within the approximate attack range of the missile given the initial launch location and airspeed, and/or targets that are within approximate antenna range and field of view for the control aircraft."		
SLAM_FRD-2578	02-08-02 Route Planning The SLAM UPC shall include the ability to modify a previously defined route.		
SLAM_FRD-2579	02-08-02 Route Planning The SLAM UPC shall provide Route Planning to enable the operator to plan valid SLAM pre-planned (PP) missions which include man-in-the-loop (MITL) or automatic target acquisition (ATA); and target of opportunity (TOO).		
SLAM_FRD-2580	02-08-02 Route Planning The SLAM UPC Route Development shall provide the capability to build a mission route.		
SLAM_FRD-2581	02-08-02 Route Planning "The SLAM UPC shall allow the operator to plan the mission starting at the launch point and working inward towards the target (Launch In), define a target and work outward (Target Out), define both a launch point and target and construct the route between the two points."		
SLAM_FRD-2582	02-08-02 Route Planning The SLAM UPC shall allow the operator to specify the time-on-target desired.		
SLAM_FRD-2583	02-08-02 Route Planning The SLAM UPC shall use the specified time-on-target and the min/max flight time from the Fast Flyout Simulation (FFS) to determine and report the required launch time		
SLAM_FRD-2584	02-08-02 Route Planning "The SLAM UPC shall not restrict or limit the operator in the method of developing a route, unless insufficient information is available to perform that action. "		
SLAM_FRD-2585	02-08-02 Route Planning The SLAM UPC shall allow for final placement of the control aircraft to be defined anytime after the terminal segment is		

	specified.		
SLAM_FRD-2586	02-08-02 Route Planning The SLAM UPC shall permit the planner to perform any function as long as the prerequisite information for that function has been defined		
SLAM_FRD-2587	02-08-02 Route Planning The SLAM UPC shall provide the operator with the option to ABORT the last command entered during Route Planning.		
SLAM_FRD-2588	02-08-02 Route Planning The SLAM UPC shall provide the operator with the ability to plan an 8-segment route.		
SLAM_FRD-2589	02-08-02 Route Planning The SLAM UPC shall allow the operator to graphically construct the mission profile via a locator device and/or a keyboard entered location.		
SLAM_FRD-2590	02-08-02 Route Planning "The SLAM UPC shall require the operator to define the planning mode (launch in, target out, or both)"		
SLAM_FRD-2591	02-08-02 Route Planning "The SLAM UPC shall display the valid regions for the next valid waypoint, and/or the mission final end point in distinguishing colors on the geographical display(s)"		
SLAM_FRD-2592	02-08-02 Route Planning The SLAM UPC shall provide the operator with the ability to select the end point of the current segment with either the keyboard and/or with a locator device.		
SLAM_FRD-2593	02-08-02 Route Planning The SLAM UPC shall allow selection of end points only within the defined valid regions.		
SLAM_FRD-2594	02-08-02 Route Planning "The SLAM UPC shall allow the operator to continue constructing the mission profile, segment by segment, until the final end point is defined (by inputting a point within the region for the final end point)."		
SLAM_FRD-2595	02-08-02 Route Planning "The SLAM UPC shall allow the operator to manipulate (move, add or delete) the		

	current segment end point or altitude, within the defined regions."		
SLAM_FRD-2596	02-08-02 Route Planning "The SLAM UPC shall allow the operator to delete segments in reverse order of how they were created (i.e. from final end point towards the first and visa versa), or modify selected waypoints within displayed limitations."		
SLAM_FRD-2597	02-08-02 Route Planning The SLAM UPC shall not allow the operator to construct a mission profile that is inconsistent with the SLAM/SLAM ER System Specification		
SLAM_FRD-2598	02-08-02 Route Planning "The SLAM UPC shall insure that if any manipulation of the mission profile occurs at any time by the SLAM UPC, the mission shall be labeled as invalid."		
SLAM_FRD-2599	02-08-02 Route Planning THE SLAM UPC shall constrain the placement of the final waypoint of the terminal segment for an ATA target to insure adherence to ingress azimuth constraints. These constrain both the horizontal approach to the target and the vertical profile to the target		
SLAM_FRD-2600	02-08-02 Route Planning The SLAM UPC shall provide Target of Opportunity (TOO) missions where the specific details of the target may or may not be known prior to aircraft departure.		
SLAM_FRD-2601	02-08-02 Route Planning The SLAM UPC shall provide a set of default TOO mission parameters that can be modified at a later time.		
SLAM_FRD-2602	02-08-02 Route Planning The SLAM UPC shall allow a TOO mission to be saved as a mission within the UPC and downloaded to the weapon in the same manner as the pre-planned missions.		
SLAM_FRD-2603	02-08-02 Route Planning "The SLAM UPC shall provide a set of parameters that will contain, at a minimum: Fly-Out Altitude (Land, ASuW); 2. Search Altitude (Land, ASuW); 3. Fuzing Option (instantaneous, short, long, Delay 1, Delay 2) ; 4. Impact Angle (Land); 5.		

	Alt. Transition Range-To-Go (Land, ASuW); 6. Launch Point Min/Max. Altitude (Land, ASuW); 7. Launch Point Min./Max. Mach No. (Land, ASuW); 8. Field of View Option (Land, ASuW); 9. Tracker Polarity (Land, ASuW); 10. Land/Ship Attack (Land, ASuW); 11. Inertial Terminal Guidance Flag (impact/overfly Land, ASuW); 12. Geoid Height; 13. Seeker Video turn on range (Land, ASuW)."		
SLAM_FRD-2604	02-08-03 Fast Flyout The SLAM UPC Fast Flyout Simulation (FFS) shall execute once a mission profile is defined.		
SLAM_FRD-2605	02-08-03 Fast Flyout The SLAM UPC FFS shall analyze the missile route and determine if it meets the criteria necessary to ensure mission success.		
SLAM_FRD-2606	02-08-03 Fast Flyout "The SLAM UPC FFS Analysis shall include: terrain clobber, fuel exhaustion, insufficient speed to maintain aerodynamic lift, inability to maintain course due to excessive crosstrack, and any other criteria determined by the GSMP IPT to be mission critical. "		
SLAM_FRD-2607	02-08-03 Fast Flyout "The SLAM UPC shall provide, after the FFS has completed and if the mission failed, a Report Window to return the results to the operator, including segments within the profile where there were mission failures, and suggested modifications."		
SLAM_FRD-2608	02-08-03 Fast Flyout The SLAM UPC shall allow the operator to save a defined mission in order to modify or adjust the mission profile and re-analyze it via the FFS.		
SLAM_FRD-2609	02-08-03 Fast Flyout "The SLAM UPC shall allow a mission, successfully verified by the FFS, to be included in a Tagset for download to a data transfer device."		
SLAM_FRD-2610	02-08-03 Fast Flyout The SLAM UPC FFS function shall allow the operator to set options for the FFS.		
SLAM_FRD-2611	02-08-03 Fast Flyout "The SLAM UPC		

	shall allow the operator to either select the first leg temperature or request a range of valid temperatures for the first leg to be generated from the FFS results. The first leg temperature may be obtained from his input, JMPS provided weather data, or Tactical Environment Support System (TESS), etc. "		
SLAM_FRD-2612	02-08-03 Fast Flyout The SLAM UPC shall allow the operator to enable graphic display of the FFS results.		
SLAM_FRD-2613	02-08-03 Fast Flyout "THE SLAM UPC shall provide the operator with the option of displaying successful flights, failed flights, or both."		
SLAM_FRD-2614	02-08-03 Fast Flyout "The SLAM UPC shall provide a report, upon operator request, at the completion of the FFS detailing the results of the analysis and suggested modifications."		
SLAM_FRD-2615	02-08-03 Fast Flyout "The SLAM UPC shall insure that once a mission profile is defined, the FFS shall allow the operator to proceed to other functions (i.e. the Threat Analysis) to continue mission analysis and planning."		
SLAM_FRD-2616	02-08-03 Fast Flyout The SLAM UPC shall not allow the operator to download the mission to a missile if no FFS results are available or the FFS results are invalid .		
SLAM_FRD-2617	02-08-03 Fast Flyout "The SLAM UPC shall display a report window when the operator exits the FFS function specifying the allowable temperature range for the first leg altitude as planned, and launch altitude/airspeed limits if applicable (i.e. as planned 76 deg F, if launch greater than 0.7 mach above 5000 ft, then 78 deg F max)."		
SLAM_FRD-2618	02-08-04 Target Definition "The SLAM UPC shall allow targets, for MITL missions, to be selectable from existing target databases provided by JMPS (e.g., MIDB) or new targets can be created during target definition"		

SLAM_FRD-2619	02-08-04 Target Definition "The SLAM UPC shall inform the operator, once the target has been placed, of the existing targets within the area and provide the ability to select an existing target or create a new one associated with the location of the target just placed."		
SLAM_FRD-2620	02-08-04 Target Definition "The SLAM UPC shall require the operator, for ATA missions, to define the target prior to performing route construction, i.e., only target defined mission planning is allowed. "		
SLAM_FRD-2621	02-08-05 Target Acquisition "The SLAM UPC Target Acquisition Analysis (TAA) function shall provide a computation of the ability of the air vehicle to acquire the target during interactive route development, due to target and environment characteristics"		
SLAM_FRD-2622	02-08-05 Target Acquisition The SLAM UPC TAA shall approximate Maverick Seeker IIR characteristics in the analysis.		
SLAM_FRD-2623	02-08-05 Target Acquisition "The SLAM UPC TAA shall open a Report Window, upon selection, showing the current options including the target type and characteristics. "		
SLAM_FRD-2624	02-08-05 Target Acquisition "The SLAM UPC TAA shall run the analysis, after any changes are made to the current options, the displays will be updated showing the results (acquisition range), and the menu selection characteristics for the TAA will be changed to indicate valid results are available."		
SLAM_FRD-2625	02-08-05 Target Acquisition The SLAM UPC TAA shall ensure that any subsequent changes to the target characteristics will invalidate the results and cause the TAA menu to indicate that invalid results are available.		
SLAM_FRD-2626	02-08-05 Target Acquisition The SLAM UPC TAA shall be disabled if no target has been defined for the		

	currently active route.		
SLAM_FRD-2627	02-08-05 Target Acquisition The SLAM UPC TAA execution shall not be a requirement which limits an operator from downloading a mission to a missile.		
SLAM_FRD-2628	02-08-06 Launch & Control Aircraft "The SLAM UPC shall allow the user to specify aircraft flight parameters necessary for a successful, coordinated mission. The two primary events to be defined are the Missile Launch and the Control Aircraft flight parameters."		
SLAM_FRD-2629	02-08-06 Launch & Control Aircraft "The SLAM UPC Missile Launch shall require the specification of the launch window that must be attained for a mission. This window includes specification of the launch location (i.e. latitude, longitude, and altitude), aircraft speed, and aircraft heading. "		
SLAM_FRD-2630	02-08-06 Launch & Control Aircraft "The SLAM UPC Control Aircraft flight profile shall define the segment that allows proper data link communication between the missile and the aircraft. The Control Aircraft flight profile is defined by the range / bearing from target, inbound or outbound, control altitude, heading, and location (i.e. latitude and longitude of segment end points). "		
SLAM_FRD-2631	02-08-06 Launch & Control Aircraft "The SLAM UPC shall utilize actual launch and control aircraft parameters available from JMPS (type, speed limits, etc), as necessary for mission planning. "		
SLAM_FRD-2632	02-08-06 Launch & Control Aircraft The SLAM UPC shall provide the capability to specify the Launch Aircraft parameters.		
SLAM_FRD-2633	02-08-06 Launch & Control Aircraft "The SLAM UPC Launch Aircraft parameters shall include, but not be limited to, launch coordinate location, launch altitude, launch velocity, and		

	launch heading."		
SLAM_FRD-2634	02-08-06 Launch & Control Aircraft "The SLAM UPC shall allow the operator to enter launch tolerances or deviations for such items as airspeed, altitude, heading, ground track, and ground speed."		
SLAM_FRD-2635	02-08-06 Launch & Control Aircraft The SLAM UPC shall provide the operator with the ability to specify the launch parameters with either the keyboard and/or a locator device.		
SLAM_FRD-2636	02-08-06 Launch & Control Aircraft The SLAM UPC launch parameters shall be the same (at the launch point) for both the missile and the launch aircraft.		
SLAM_FRD-2637	02-08-06 Launch & Control Aircraft The SLAM UPC shall provide the capability to specify whether GPS acquisition will be required prior to weapon release or can be performed following weapon release.		
SLAM_FRD-2638	02-08-06 Launch & Control Aircraft "The SLAM UPC shall insure that a launch point is specified for the missile/launch aircraft as a requirement for validating a mission, before it can be downloaded to a missile. "		
SLAM_FRD-2639	02-08-06 Launch & Control Aircraft The SLAM UPC shall provide the capability to specify the Control Aircraft parameters.		
SLAM_FRD-2640	02-08-06 Launch & Control Aircraft "The SLAM UPC Control Aircraft parameters shall include, but not be limited to, start and end coordinate locations, control aircraft altitude, maximum control aircraft velocity, and control aircraft heading. "		
SLAM_FRD-2641	02-08-06 Launch & Control Aircraft The SLAM UPC shall provide the operator with the ability to specify the control aircraft parameters with either the keyboard and/or a locator device.		

SLAM_FRD-2642	02-08-06 Launch & Control Aircraft The SLAM UPC shall allow the operator to display the results of the Data Link Masking to assist the operator in optimizing the control aircraft placement.		
SLAM_FRD-2643	02-08-06 Launch & Control Aircraft The SLAM UPC shall not require control aircraft parameters to validate a mission.		
SLAM_FRD-2644	02-09-01 Image Management Tool The SLAM UPC shall define the aimpoint on the target from within an image management tool		
SLAM_FRD-2645	02-09-01 Image Management Tool The SLAM UPC shall provide an Image Management Tool that shall list the imagery available on the host computer.		
SLAM_FRD-2646	02-09-01 Image Management Tool The SLAM UPC Image Management Tool shall provide the capability to query and retrieve imagery from any networked imagery database such as JSIPS-N and Image Product Library (IPL).		
SLAM_FRD-2647	02-09-01 Image Management Tool The SLAM UPC Image Management Tool shall present a list of any queried imagery that coincides with the location of the target placed by the operator.		
SLAM_FRD-2648	02-09-01 Image Management Tool The SLAM UPC Image Management Tool shall list only imagery that meets the SLAM ATA imagery requirement.		
SLAM_FRD-2649	02-09-01 Image Management Tool "The SLAM UPC Image Management Tool shall provide the operator with the option to screen for only desired imagery based on the capabilities of the data base being queried, such as image collection attitude, image type (e.g., EO, IR, SAR, reconnaissance), and image collection date and time. Collection attitude refers to the azimuth and elevation angles of the collection platform from which the image was obtained."		
SLAM_FRD-2650	02-09-01 Image Management Tool "The SLAM UPC Image Management		

	Tool shall allow the operator to specify a range of values for parameters where ranges of values apply, such as image collection azimuth and elevation angles."		
SLAM_FRD-2651	02-09-01 Image Management Tool "The SLAM UPC Image Management Tool shall display an image, once it is selected from the list."		
SLAM_FRD-2652	02-09-01 Image Management Tool The SLAM UPC Image Management Tool shall allow the operator to place a target/aimpoint on the target and morph the target and any other structures.		
SLAM_FRD-2653	02-09-01 Image Management Tool "The SLAM UPC Image Management Tool shall generate an image reference for use by the missile, in accordance with SLAM ER System Specifications, upon exiting from this function."		
SLAM_FRD-2654	02-09-01 Image Management Tool "The SLAM UPC Image Management Tool shall allow the operator to recall an existing image reference file, zoom in or out and view the selected aimpoint."		
SLAM_FRD-2655	02-09-01 Image Management Tool "The SLAM UPC Image Management Tool shall allow the operator to recall an existing ATA morph, zoom in or out and view the morph."		
SLAM_FRD-2656	02-09-02 Define Cultural Features The SLAM UPC Define Cultural Features function shall allow the operator to specify which cultural features should be considered in the Target Masking Analysis.		
SLAM_FRD-2657	02-09-02 Define Cultural Features The SLAM UPC Define Cultural Features shall allow the operator to select predefined cultural features from the data base within 10 nautical miles of target.		
SLAM_FRD-2658	02-09-02 Define Cultural Features The SLAM UPC Define Cultural Features shall allow the operator to define and/or modify mission specific cultural features within 10 nautical		

	miles of target.		
SLAM_FRD-2659	02-09-02 Define Cultural Features "The SLAM UPC Define Cultural Feature shall include a reference number, location (either coordinates or range/bearing from the target), elevation (mean sea level), axis of the feature (i.e. orientation of the length axis to true north), type of feature (rectangular, cylinder, sphere, etc.), size of the feature (height above ground level), length, width, radius, and etc, as appropriate for the feature type, and a description."		
SLAM_FRD-2660	02-09-02 Define Cultural Features The SLAM UPC Define Cultural Feature shall include the morphs created for ATA that are within 10 nautical miles of the target.		
SLAM_FRD-2661	02-09-02 Define Cultural Features The SLAM UPC Define Cultural Features shall provide the operator with the option of graphically displaying the cultural features defined around the target area.		
SLAM_FRD-2662	02-09-02 Define Cultural Features The SLAM UPC Define Cultural Features graphical displays shall include the options of a top view or a view from an operator chosen viewing location.		
SLAM_FRD-2663	02-09-02 Define Cultural Features "The SLAM UPC Define Cultural Features graphical display shall allow the operator to choose the viewing location by selecting a point along the terminal segment, or the operator can define the input values for view location range from the target, view location bearing from the target (relative to true north), and either a view elevation angle (relative to local level) or a view elevation (AGL at the target). "		
SLAM_FRD-2664	02-09-02 Define Cultural Features "The SLAM UPC Define Cultural Features graphical display shall use a distinguishing color to fill in the objects defining the cultural features, with hidden lines removed, so that the		

	display approximates the view of the target area."		
SLAM_FRD-2665	02-09-02 Define Cultural Features "The SLAM UPC Define Cultural Features shall be able to be performed on all background (including DTED, charts/maps, and supported imagery) and scales supported by JMPS."		
SLAM_FRD-2666	02-09-02 Define Cultural Features The SLAM UPC Define Cultural Features shall be disabled if no target has been defined for the currently active route.		
SLAM_FRD-2667	02-09-02 Define Cultural Features The SLAM UPC Define Cultural Features shall be enabled if a target has been defined for the currently active route.		
SLAM_FRD-2668	02-09-02 Define Cultural Features The SLAM UPC Define Cultural Features execution shall not be a requirement that limits an operator from downloading a mission to a missile.		
SLAM_FRD-2669	02-10-01 Data Link Masking Analysis The SLAM UPC Data Link Masking Analysis shall compute weapons and control aircraft data link masks that will assist the operator in selecting the location and altitude of the control segment.		
SLAM_FRD-2670	02-10-01 Data Link Masking Analysis "The SLAM UPC Data Link Masking Analysis shall take into account the terminal trajectory of the weapon, search altitude, control aircraft direction (inbound or outbound), altitude, speed, terrain, and any jammers in the area."		
SLAM_FRD-2671	02-10-01 Data Link Masking Analysis "The SLAM UPC Data Link Masking Analysis shall provide the operator with recommendations regarding terminal trajectory options that will increase the probability of mission success in the presence of data link and GPS jamming, and surface-to-air threats in the target area."		

SLAM_FRD-2672	02-10-01 Data Link Masking Analysis The SLAM UPC Weapon Data Link Masking Analysis shall display areas where there is two way communication between the missile and aircraft for a specified control altitude.		
SLAM_FRD-2673	02-10-01 Data Link Masking Analysis "The SLAM UPC Weapon Data Link Masking shall indicate any areas where it will not be possible to receive video due to terrain masking, data link transmission characteristics, and jamming effects"		
SLAM_FRD-2674	02-10-01 Data Link Masking Analysis The SLAM UPC Weapon Data Link Masking shall account for the user specified terminal trajectory and use the flight path generated by the FFS for the analysis.		
SLAM_FRD-2675	02-10-01 Data Link Masking Analysis "The SLAM UPC Weapon Data Link Masking shall perform an analysis based on missile antenna beam characteristics, terrain, flight route, terminal flight approach, and maneuvers (such as dive angle)."		
SLAM_FRD-2676	02-10-01 Data Link Masking Analysis "The SLAM UPC Weapon Data Link Masking shall display a graphical 2-D display (using the Vertical Profile Display or other similar function). This will allow the planner to view datalink coverage based on antenna characteristics, terrain, and terminal maneuvers"		
SLAM_FRD-2677	02-10-01 Data Link Masking Analysis The SLAM UPC Data Link Masking Analysis will be executed on the terminal segment after any changes are made to the current options.		
SLAM_FRD-2678	02-10-01 Data Link Masking Analysis "The SLAM UPC Data Link Masking Analysis displays will be updated, after any changes, showing the results and the menu selection characteristics for Weapon Data Link Masking Analysis will be changed to indicate valid results are available. "		
SLAM_FRD-2679	02-10-01 Data Link Masking Analysis		

	The SLAM UPC Weapon Data Link Masking Analysis shall be disabled if no target has been defined for the currently active route.		
SLAM_FRD-2680	02-10-01 Data Link Masking Analysis The Control Aircraft Data Link Masking Analysis function provides a computation of the ability of the Control Aircraft to transmit data link commands to the weapon considering terrain and cultural feature masking at any point along the terminal segment of the route.		
SLAM_FRD-2681	02-10-01 Data Link Masking Analysis The SLAM UPC Control Aircraft Masking shall provide a computation of the ability of the control aircraft to transmit data link commands		
SLAM_FRD-2682	02-10-01 Data Link Masking Analysis The SLAM UPC Control Aircraft Masking shall provide a visual representation of where commands may be received by the weapon at the specified search altitude.		
SLAM_FRD-2683	02-10-01 Data Link Masking Analysis The SLAM UPC Control Aircraft Masking shall include any areas where it will not be possible to receive commands due to terrain masking		
SLAM_FRD-2684	02-10-01 Data Link Masking Analysis The SLAM UPC Control Aircraft Masking shall display (using the Vertical Profile Display or a similar function) a graphical 2-D display of the control masking that will allow the operator to view the control aircraft coverage based on altitude.		
SLAM_FRD-2685	02-10-01 Data Link Masking Analysis The SLAM UPC Control Aircraft Masking shall allow the operator to make changes to the current options using either the keyboard and/or a locator device		
SLAM_FRD-2686	02-10-01 Data Link Masking Analysis "The SLAM UPC Control Aircraft Masking shall allow changes made to the current options to be displayed showing the updated results, and the menu selection characteristics for Control		

	Aircraft Data Link Masking Analysis will change to indicate valid results are available."		
SLAM_FRD-2687	02-10-01 Data Link Masking Analysis "The SLAM UPC Control Aircraft Data Link Masking Analysis shall invalidate the results if any subsequent changes are made to the terminal segment of the route, control aircraft placement, or target characteristic, and the menu selection characteristics will change to indicate that the results are invalid."		
SLAM_FRD-2688	02-10-01 Data Link Masking Analysis The SLAM UPC Control Aircraft Data Link Masking Analysis shall be disabled if no target has been defined for the currently active route.		
SLAM_FRD-2689	02-10-02 Terrain Clobber Analysis The SLAM UPC Terrain Clobber Analysis shall analyze a route to verify that a mission failure will not occur due to terrain clobber.		
SLAM_FRD-2690	02-10-02 Terrain Clobber Analysis The SLAM UPC Terrain Clobber Analysis will receive mission data from the FFS.		
SLAM_FRD-2691	02-10-02 Terrain Clobber Analysis The SLAM UPC Terrain Clobber Analysis will provide the operator with suggestions to avoid clobber and prompt to modify the mission profile If the analysis shows that terrain clobber will occur.		
SLAM_FRD-2692	02-10-03 Route Analysis "The SLAM UPC Route Analysis Function shall consist of the following: Target Masking, Define Cultural Features, Target Acquisition, Data Link Masking, Terrain Clobber, and Threat Analysis		
SLAM_FRD-2693	02-10-03 Route Analysis "The SLAM UPC shall allow the operator to generate a 3-D perspective view at any location along the flight path, or from any selected view point at a user specified view angle with DTED, CADRG, imagery or a combination of these as a background."		

SLAM_FRD-2694	02-10-04 Target Masking Analysis The SLAM UPC Target Masking Analysis function shall provide an advisory to the operator of the ability of the air vehicle to view the target location during interactive route development		
SLAM_FRD-2695	02-10-04 Target Masking Analysis "The SLAM UPC Target Masking Analysis shall enable the analysis to run, the displays to be updated showing the results, and the menu selection characteristics for Target Masking Analysis will change to indicate valid results are available."		
SLAM_FRD-2696	02-10-04 Target Masking Analysis The SLAM UPC Target Masking Analysis shall indicate that previous results are no longer valid if any subsequent changes are made to the terminal segment of the route or cultural features.		
SLAM_FRD-2697	02-10-04 Target Masking Analysis The SLAM UPC Target Masking Analysis will be disabled if no target has been defined for the currently active route.		
SLAM_FRD-2698	02-10-04 Target Masking Analysis The SLAM UPC Target Masking Analysis shall be enabled from the Terminal Segment Definition if a target has been defined for the currently active route.		
SLAM_FRD-2699	02-11-01 Report Functions & Data "The SLAM UPC shall support Report functions which are capable of generating alphanumeric reports/summaries for display and in hard copy, that are specific to SLAM. "		
SLAM_FRD-2700	02-11-01 Report Functions & Data "The SLAM UPC shall allow the operator to direct all report data and graphics to a Report Window, Personal Computer (PC) high density 3.5 in. DOS floppy disk (ASCII reports only), or to a printer. "		
SLAM_FRD-2701	02-11-01 Report Functions & Data The SLAM UPC shall format the DOS floppy disk as tab-separated text. This will allow the operator to import the mission data into commercial software programs for presentations and		

	briefings. This applies to all reports generated by the UPC with the exception of the kneeboard card report.		
SLAM_FRD-2702	02-11-01 Report Functions & Data "The SLAM UPC shall create reports such as: a) SLAM Mission Summary Reports; b) Kneeboard Cards; c) Tagset Summary; d) Missions vs. Tagset Summary; e) Cultural Features Reports; f) Threat Analysis Reports; g) ATA Imagery Reports; and h) Ability to print screen for HSD, Vertical Profile"		
SLAM_FRD-2703	02-11-01 Report Functions & Data "The SLAM UPC DBA shall have the capability to generate, review and print listings of various data base files to include: a) a list of missions stored in the database, and b) a list of Air Vehicle flight parameter values."		
SLAM_FRD-2704	02-11-01 Report Functions & Data The SLAM UPC shall provide Alphanumeric Reports and Summaries with the following format: a) width shall be no greater than 80 columns; b) the first page shall include a report title; c) columnar data shall be clearly labeled near the top of each page; d) all reports shall have the date and time of generation contained in the report; e) printed reports shall have security classification located at the top and bottom of each page; f) mission specific reports shall include the name of the mission and planner; g) all coordinate locations shall be displayed in both the user selected datum/coordinate system and WGS-84; h) all clock times shall be displayed in GMT.		
SLAM_FRD-2705	02-11-01 Report Functions & Data "The SLAM UPC shall include the display and printout of Notes, Warnings and Errors that impact or cast doubt upon the validity of data. "		
SLAM_FRD-2706	02-11-01 Report Functions & Data "The SLAM UPC Notes, Warnings and Errors shall not prevent the display or printout of a report or a summary. If no data can be generated, the report or		

	summary need not be created or offered for display. "		
SLAM_FRD-2707	02-11-02 Mission Summary Reports The SLAM Mission Summary Report shall be the default on-line report displayed.		
SLAM_FRD-2708	02-11-02 Mission Summary Reports The SLAM UPC Mission Summary Report shall be available in hard copy.		
SLAM_FRD-2709	02-11-02 Mission Summary Reports The SLAM UPC shall allow the operator to save the Mission Summary Report to a high density 3.5 in DOS (PC) floppy disk in tab separated text format.		
SLAM_FRD-2710	02-11-02 Mission Summary Reports The SLAM UPC Mission Summary Report shall consists of at least the following information:		
SLAM_FRD-2711	a) mission name (block name/mission ID),		
SLAM_FRD-2712	b) temperature (degrees Fahrenheit)		
SLAM_FRD-2713	c) mission type (ATA or MITL),		
SLAM_FRD-2714	d) day type,		
SLAM_FRD-2715	e) mission date (day, month, year),		
SLAM_FRD-2716	f) target information:		
SLAM_FRD-2717	1) Coordinate location (input datum and WGS-84 system),		
SLAM_FRD-2718	2) target ID (CAT-WAC/BE code)		
SLAM_FRD-2719	3) elevation (feet MSL and geodetic),		
SLAM_FRD-2720	4) target type (ATA or MITL),		
SLAM_FRD-2721	1) ATA parent image name,		
SLAM_FRD-2722	2) ATA reference image name,		
SLAM_FRD-2723	3) ATA image collection date,		
SLAM_FRD-2724	4) ATA image azimuth (degrees True),		
SLAM_FRD-2725	5) ATA image elevation angle (degrees),		
SLAM_FRD-2726	6) ATA image azimuth range (degrees		

	True),		
SLAM_FRD-2727	7) ATA image elevation range (degrees),		
SLAM_FRD-2728	8) ATA image GSD,		
SLAM_FRD-2729	5) forecast cloud ceiling (feet AGL)		
SLAM_FRD-2730	6) minimum allowable cloud level (feet AGL),		
SLAM_FRD-2731	7) predicted target acquisition range (nm),		
SLAM_FRD-2732	8) final attack heading (degrees True),		
SLAM_FRD-2733	9) time on target (hours, minutes, seconds),		
SLAM_FRD-2734	10) time on target early (hours, minutes, seconds),		
SLAM_FRD-2735	11) time on target late (hours, minutes, seconds),		
SLAM_FRD-2736	12) target height (feet AGL),		
SLAM_FRD-2737	13) aimpoint height (feet AGL),		
SLAM_FRD-2738	g) flight time (minutes, seconds),		
SLAM_FRD-2739	h) time-on-target (hours, minutes, seconds, GMT),		
SLAM_FRD-2740	i) mission status (valid, invalid, or not tested),		
SLAM_FRD-2741	j) overall threat effectiveness (%),		
SLAM_FRD-2742	k) print date/time (day, month, year/hour:minute),		
SLAM_FRD-2743	l) planner's name and organization,		
SLAM_FRD-2744	m) launch information:		
SLAM_FRD-2745	1) altitude (feet MSL),		
SLAM_FRD-2746	2) launch time (hours, minutes, seconds),		
SLAM_FRD-2747	3) coordinate location (input datum and WGS-84 system),		
SLAM_FRD-2748	4) number of satellites (SVs) Visible		

	and Required,		
SLAM_FRD-2749	5) launch aircraft type,		
SLAM_FRD-2750	6) course (degrees),		
SLAM_FRD-2751	7) speed (Mach),		
SLAM_FRD-2752	8) off-axis angle (degrees),		
SLAM_FRD-2753	9) missile flyout course (degrees true),		
SLAM_FRD-2754	10) forecast GDOP,		
SLAM_FRD-2755	11) required GDOP,		
SLAM_FRD-2756	12) launch coordinate tolerance (nautical miles),		
SLAM_FRD-2757	13) forecast winds,		
SLAM_FRD-2758	14) forecast temperature (degrees Fahrenheit),		
SLAM_FRD-2759	15) min/max temperature envelope (degrees Fahrenheit),		
SLAM_FRD-2760	n) first leg information:		
SLAM_FRD-2761	1) forecast temperature (degrees Fahrenheit),		
SLAM_FRD-2762	2) min/max temperature envelope (degrees Fahrenheit),		
SLAM_FRD-2763	3) missile fly out altitude,		
SLAM_FRD-2764	4) flight mode (Baseline SLAM RTA, ITA, IAH, SLAM ER ATF, IAH),		
SLAM_FRD-2765	o) waypoint information:		
SLAM_FRD-2766	1) label,		
SLAM_FRD-2767	2) flight mode (Baseline SLAM RTA, ITA, IAH, SLAM ER ATF, IAH),		
SLAM_FRD-2768	3) course (degrees true),		
SLAM_FRD-2769	4) altitude command, either inertial altitude command above the WGS-84 ellipsoid, or clearance command,		
SLAM_FRD-2770	5) leg distance (nautical miles to the		

	nearest tenth),		
SLAM_FRD-2771	6) cumulative mission distance (nautical miles to the nearest tenth),		
SLAM_FRD-2772	7) leg time or estimated time enroute (ETA) to the downtrack waypoint (hours, minutes, seconds),		
SLAM_FRD-2773	8) coordinate location (input datum and WGS-84 system) of the downtrack waypoint,		
SLAM_FRD-2774	9) segment's maximum terrain elevation (feet),		
SLAM_FRD-2775	p) terminal segment information:		
SLAM_FRD-2776	1) search altitude (feet above target),		
SLAM_FRD-2777	2) flight mode (Baseline SLAM RTA, ITA, IAH, SLAM ER ATF, IAH),		
SLAM_FRD-2778	3) minimum cloud level (feet AGL),		
SLAM_FRD-2779	4) attack mode (I=impact, O=overfly), ,		
SLAM_FRD-2780	5) fuzing option, 6) trajectory,		
SLAM_FRD-2781	7) impact angle (degrees),		
SLAM_FRD-2782	8) control aircraft type,		
SLAM_FRD-2783	9) control pod type,		
SLAM_FRD-2784	10) planned control altitude (feet MSL),		
SLAM_FRD-2785	11) maximum planned control range,		
SLAM_FRD-2786	12) control course (degrees true),		
SLAM_FRD-2787	13) absolute control range,		
SLAM_FRD-2788	14) control altitude for absolute control range,		
SLAM_FRD-2789	15) predicted target acquisition range,		
SLAM_FRD-2790	16) forecast absolute humidity,		
SLAM_FRD-2791	17) forecast target winds,		
SLAM_FRD-2792	18) sunrise/sunset at target in GMT,		

SLAM_FRD-2793	19) forecast temperature at target.		
SLAM_FRD-2794	q) launch aircraft information:		
SLAM_FRD-2795	1) Coordinate location (input datum and WGS-84 system),		
SLAM_FRD-2796	2) MSL altitude (feet),		
SLAM_FRD-2797	3) 'D' value (feet) - Baseline SLAM		
SLAM_FRD-2798	4) true heading (degrees),		
SLAM_FRD-2799	5) air speed (Mach),		
SLAM_FRD-2800	6) ground speed (knots),		
SLAM_FRD-2801	7) and launch time (hours, minutes, seconds GMT),		
SLAM_FRD-2802	r) control aircraft information:		
SLAM_FRD-2803	1) Coordinate locations (input datum and WGS-84 system) of closer control point and farther control point,		
SLAM_FRD-2804	2) ground speed (knots) (maximum ground speed based on two minutes of video),		
SLAM_FRD-2805	3) altitude (feet MSL),		
SLAM_FRD-2806	4) range/bearing from target to closer and farther control points,		
SLAM_FRD-2807	5) true heading (degrees),		
SLAM_FRD-2808	s) seeker turn-on information:		
SLAM_FRD-2809	1) time (hours, minutes, seconds GMT) based on the average speed of the missile for the given day type,		
SLAM_FRD-2810	2) time to video early (hours, minutes, seconds GMT) based on the high speed of the missile for the given day type,		
SLAM_FRD-2811	3) time to video late(hours, minutes, seconds GMT) based on the low speed of the missile for the given day type,		
SLAM_FRD-2812	4) range from target (NM),		
SLAM_FRD-2813	5) field of view (wide or narrow), - Applies only to Baseline SLAM		

SLAM_FRD-2814	6) polarity (white track or black track),		
SLAM_FRD-2815	7) search altitude (feet MSL),		
SLAM_FRD-2816	8) Tracking Type(Land, AsuW)		
SLAM_FRD-2817	9) Tracking Mode (Centroid, FC, ATA) – Applies only to ER		
SLAM_FRD-2818	t) Fast Flyout Simulation		
SLAM_FRD-2819	1) Temperature range (degrees F, min, max)		
SLAM_FRD-2820	2) Time to video		
SLAM_FRD-2821	3) Missile flight time (min, average, max)		
SLAM_FRD-2822	4) Missile impact angle (degrees from horizontal)		
SLAM_FRD-2823	02-11-03 GPS Data & Reports The SLAM GPS Summary Report shall include GPS Time Windows in either a graphical and/or alphanumeric format.		
SLAM_FRD-2824	02-11-03 GPS Data & Reports The SLAM UPC shall provide the GPS Summary Report both on-line and in hard copy and consist of at least the following information: a) coordinate location (input datum and WGS-84 system) of the GPS prediction; b) MSL altitude (feet); c) Report date; d) GPS Time Windows (all clock times shall be in Greenwich Meridian Time); e) date and expiration date of the almanac data; and f) current local time.		
SLAM_FRD-2825	02-11-03 GPS Data & Reports The SLAM UPC shall allow the operator to select an alphanumeric GPS report or a graphical GPS report.		
SLAM_FRD-2826	02-11-03 GPS Data & Reports The SLAM UPC GPS alphanumeric report shall display the GPS Time Windows as a listing of the time periods during the day when there are acceptable GPS windows.		
SLAM_FRD-2827	02-11-03 GPS Data & Reports The SLAM UPC GPS graphical report shall		

	display the GPS Time Windows as as a pie chart. One revolution of the pie chart shall represent 24 hours with midnight at the top of the display and noon at the bottom. The time periods of acceptable GPS windows shall be represented by pie slices that are displayed in green. The time periods of unacceptable GPS windows shall be represented by pie slices that are displayed in red. An alphanumeric listing of acceptable GPS windows may exist on the graphical display along with the pie chart.		
SLAM_FRD-2828	02-11-03 GPS Data & Reports "The SLAM UPC shall be capable, at the operators option, of providing GPS data with GPS Time Windows at the coordinate location, altitude, and date provided by the operator."		
SLAM_FRD-2829	02-11-03 GPS Data & Reports "The SLAM UPC shall allow the operator to enter a coordinate location, altitude, date and time, and the Mission Summary Report shall provide the GDOP and number of SVs visible."		
SLAM_FRD-2830	02-11-04 Cultural Features Report "The SLAM UPC shall be capable, upon operator request, of generating an alphanumeric Cultural Features Report which shall be available both on-line and in hard copy."		
SLAM_FRD-2831	02-11-04 Cultural Features Report The SLAM UPC Cultural Features Report shall consist of at least the following information:		
SLAM_FRD-2832	a) block name/mission ID,		
SLAM_FRD-2833	b) target information:		
SLAM_FRD-2834	1) target code (CAT-WAC/BE code),		
SLAM_FRD-2835	2) target type,		
SLAM_FRD-2836	3) datum,		
SLAM_FRD-2837	4) coordinate location (input datum and WGS-84 system),		
SLAM_FRD-2838	5) elevation (feet),		

SLAM_FRD-2839	6) source (APPS, JOG, 1:50),		
SLAM_FRD-2840	7) accuracy (feet),		
SLAM_FRD-2841	8) geoid height (meters),		
SLAM_FRD-2842	c) estimated target detection range (nm),		
SLAM_FRD-2843	d) target area weather information:		
SLAM_FRD-2844	1) forecast cloud ceiling (feet AGL),		
SLAM_FRD-2845	2) minimum allowable cloud ceiling (feet AGL),		
SLAM_FRD-2846	3) outside air temperature (degrees F or C),		
SLAM_FRD-2847	4) relative humidity (%),		
SLAM_FRD-2848	5) absolute humidity (gram/cubic meter),		
SLAM_FRD-2849	6) forecast and minimum allowable cloud level (feet AGL),		
SLAM_FRD-2850	7) target-to-background differential temperature (degrees F),		
SLAM_FRD-2851	e) cultural feature information:		
SLAM_FRD-2852	1) reference number,		
SLAM_FRD-2853	2) coordinate location (input datum and WGS-84 system),		
SLAM_FRD-2854	3) bearing from target (degrees True),		
SLAM_FRD-2855	4) range from the target (feet),		
SLAM_FRD-2856	5) elevation (feet),		
SLAM_FRD-2857	6) height (feet),		
SLAM_FRD-2858	7) length (feet),		
SLAM_FRD-2859	8) width (feet),		
SLAM_FRD-2860	9) axis (degrees True),		
SLAM_FRD-2861	10) description.		

SLAM_FRD-2862	02-11-04　　Cultural Features Report 　　　"The SLAM UPC shall be capable of generating both top and horizontal (from operator specified axis and location) graphical 3D views of the target area showing the target location, terrain data and cultural features."		
SLAM_FRD-2863	02-11-04　　Cultural Features Report 　　　"The SLAM UPC shall provide the operator with a 3D views which shall be at operator specified locations, or from an operator specified location along the terminal segment."		
SLAM_FRD-2864	02-11-05　　Threat Analysis Report　The SLAM UPC shall generate alphanumeric data as a result of threat analysis		
SLAM_FRD-2865	02-11-05　　Threat Analysis Report　The SLAM UPC shall allow the operator to have the option to display the data by threat or chronologically by flight leg		
SLAM_FRD-2866	02-11-05　　Threat Analysis Report　The SLAM UPC shall provide the operator with an option to limit the report to a brief description of probability of attrition's or to examine a full report listing individual exposure periods and intercepts.		
SLAM_FRD-2867	02-11-05　　Threat Analysis Report　The SLAM UPC shall provide the Threat Analysis Reports on-line or in hard copy.		
SLAM_FRD-2868	02-11-05　　Threat Analysis Summary By Leg　The SLAM UPC shall be capable of displaying an alphanumeric summary of Threat Analysis results chronologically by flight leg.		
SLAM_FRD-2869	02-11-05　　Threat Analysis Summary By Leg　The SLAM UPC full report version of the Threat Analysis Summary shall include, at a minimum, for each leg:		
SLAM_FRD-2870	a) block name/mission ID,		
SLAM_FRD-2871	b) flight leg identification,		
SLAM_FRD-2872	c) clock time at each waypoint (hours, minutes, and seconds),		

SLAM_FRD-2873	d) total probability of attrition for all threat sites encountered on the flight leg (percent),		
SLAM_FRD-2874	e) for each separate threat encountered on the flight leg:		
SLAM_FRD-2875	1) threat sequence number,		
SLAM_FRD-2876	2) threat type,		
SLAM_FRD-2877	3) threat identification (CAT-WAC/BE code, or polygon ID),		
SLAM_FRD-2878	4) total threat degrade factors used for each threat (%),		
SLAM_FRD-2879	5) total probability of attrition for each threat site encountered on the flight leg (%),		
SLAM_FRD-2880	6) exposure type (i.e., start, continued, end, or start/end),		
SLAM_FRD-2881	7) total exposure distance on the flight leg (nautical miles to the nearest tenth),		
SLAM_FRD-2882	8) total exposure time of the flight leg (minutes and seconds), and		
SLAM_FRD-2883	9) number of intercepts on the flight leg.		
SLAM_FRD-2884	02-11-05 Threat Analysis Summary By Leg The SLAM UPC brief report version of the Threat Analysis Summary shall include as a minimum:		
SLAM_FRD-2885	a) block name/mission ID,		
SLAM_FRD-2886	b) flight leg identification,		
SLAM_FRD-2887	c) clock time at each waypoint (hours, minutes, and seconds),		
SLAM_FRD-2888	d) total probability of attrition for all threat sites encountered on the flight leg (percent)		
SLAM_FRD-2889	02-11-05 Threat Analysis Summary by Threat The SLAM UPC shall be capable of displaying an alphanumeric summary of threat analysis results by threat.		

SLAM_FRD-2890	02-11-05 Threat Analysis Summary by Threat "The SLAM UPC threats shall be ordered by overall probability of attrition; however, subsequent modifications to the results due only to applying or removing the effects of threat degrades shall not alter the order of presentation."		
SLAM_FRD-2891	02-11-05 Threat Analysis Summary By Threat "The SLAM UPC full report version of the Threat Analysis Summary by Threat shall include, at a minimum, for each threat:		
SLAM_FRD-2892	a) threat sequence number,		
SLAM_FRD-2893	b) threat type,		
SLAM_FRD-2894	c) threat identification (i.e. CAT-WAC/BE code, or polygon ID),		
SLAM_FRD-2895	d) total threat degrade factor used for each threat (%),		
SLAM_FRD-2896	e) total probability of attrition for each threat (%),		
SLAM_FRD-2953	f) for each separate exposure to a threat:		
SLAM_FRD-2897	1) total probability of attrition (%),		
SLAM_FRD-2898	2) flight leg(s) affected;		
SLAM_FRD-2899	3) clock time of entry and exit (hours, minutes, and seconds),		
SLAM_FRD-2900	4) distance covered (nautical miles to the nearest tenth),		
SLAM_FRD-2901	5) total time in each exposure (minutes and seconds),		
SLAM_FRD-2902	6) total time in radar/visual view (minutes and seconds),		
SLAM_FRD-2903	7) each intercept during an exposure:		
SLAM_FRD-2904	A) probability of attrition for each intercept (%),		
SLAM_FRD-2905	B) flight leg affected by each intercept,		

SLAM_FRD-2954	C) clock time of each intercept (hours, minutes and seconds).		
SLAM_FRD-2906	02-11-05 Threat Analysis Summary By Threat "The SLAM UPC brief report versions of the Threat Analysis Summary by Threat shall include:		
SLAM_FRD-2907	a) threat sequence number,		
SLAM_FRD-2908	b) threat type,		
SLAM_FRD-2909	c) threat identification (i.e. CAT-WAC/BE code, or polygon ID),		
SLAM_FRD-2910	d) total threat degrade factor used for each threat (%),		
SLAM_FRD-2955	e) total probability of attrition for each threat (%)		
SLAM_FRD-2911	02-11-06 Tagset Summary The SLAM UPC shall be capable of displaying a summary of a Tagset both on-line and in a hard copy format.		
SLAM_FRD-2912	02-11-06 Tagset Summary The SLAM UPC Tagset Summary shall provide a description of the missions contained within a selected Tagset.		
SLAM_FRD-2913	02-11-06 Tagset Summary The SLAM UPC shall provide the operator with the option to view the Tagset Summary in either a graphical or an alphanumeric format		
SLAM_FRD-2914	02-11-06 Tagset Summary "The SLAM UPC shall provide the graphical format for the selected Tagset to overlay lines, in a distinguishing color on the geographical displays, indicating the nominal flight path of the mission contained in each Tagset, along with labels identifying the missions. Horizontal views shall indicate the nominal flight paths. "		
SLAM_FRD-2915	02-11-06 Tagset Summary "The SLAM UPC shall provide for mission labels which indicate both the mission name (block name/mission ID), and the mission tag set name (i.e. PP, PP1, PP2, etc.)"		
SLAM_FRD-2916	02-11-06 Tagset Summary The SLAM		

	UPC shall insure the alphanumeric report for the Tagset contains at least the following items:		
SLAM_FRD-2917	a) mission name (block name/mission ID),		
SLAM_FRD-2918	b) mission tagged set name (PP1, PP2, PP3, TOO)		
SLAM_FRD-2919	c) target information:		
SLAM_FRD-2920	1) target code (CAT-WAC/BE code),		
SLAM_FRD-2921	2) target type (ATA or MITL),		
SLAM_FRD-2922	3) coordinate location (input datum and WGS-84 system),		
SLAM_FRD-2923	4) elevation (feet MSL)		
SLAM_FRD-2924	d) launch information:		
SLAM_FRD-2925	1) altitude (feet MSL),		
SLAM_FRD-2926	2) speed (Mach),		
SLAM_FRD-2927	3) course (degrees true),		
SLAM_FRD-2928	4) off axis angle (degrees),		
SLAM_FRD-2929	5) launch tolerance (nautical miles),		
SLAM_FRD-2930	6) coordinate location (input datum and WGS-84 system),		
SLAM_FRD-2931	e) waypoint segment information:		
SLAM_FRD-2932	1) label,		
SLAM_FRD-2933	2) flight mode (Baseline ITA, IAH, RTA, SLAM ER ATF IAH),		
SLAM_FRD-2934	3) course (degrees true),		
SLAM_FRD-2935	4) altitude (feet - mean sea level (MSL) or above ground (AGL) as defined by the flight mode),		
SLAM_FRD-2936	5) leg distance (nautical miles to the nearest tenth),		
SLAM_FRD-2937	6) cumulative mission distance (nautical miles to the nearest tenth),		

SLAM_FRD-2938	7) downtrack waypoint coordinate location (input datum and WGS-84 system)		
SLAM_FRD-2939	02-11-07 Mission Vs Tagset Summary The SLAM UPC shall be capable of displaying a Mission versus Tagset Summary both on-line and in a hard copy format.		
SLAM_FRD-2940	02-11-07 Mission Vs Tagset Summary "The SLAM UPC shall provide the operator with the capability to display an alphanumeric report containing a summary of all mission within all selected tagsets, or a summary of all tagsets containing selected missions."		
SLAM_FRD-2941	02-11-07 Mission Vs Tagset Summary The SLAM UPC shall provide the operator the capability to select one or more tagsets.		
SLAM_FRD-2942	02-11-07 Mission Vs Tagset Summary "The SLAM UPC shall generate a report containing a list of all missions with the selected tagsets, including at least the following items: a) taggedset name; b) mission name (block name/mission ID); c) mission tagset name (PP1, PP2, PP3); d) mission owner(i.e. system ID of the operator who owns the files for this mission)"		
SLAM_FRD-2943	02-11-07 Mission Vs Tagset Summary The SLAM UPC shall provide the operator the capability to select one or more missions.		
SLAM_FRD-2944	02-11-07 Mission Vs Tagset Summary "The SLAM UPC shall generate a report with a list of all tagsets that contain the sleeted missions, including at least the following information: a) mission name; b) taggedset name and c) mission taggedset name."		
SLAM_FRD-2945	03-01 F/A-18 Management "The system shall allow for access/revision of SLAM mission data, downloading a complete SLAM mission tagset to a memory device such as an F/A-18 Memory Unit (MU)/AMU, printing reports specifically tailored for the SLAM mission, and other related utilities."		

SLAM_FRD-2946	03-01 F/A-18 Management The SLAM UPC shall be capable of writing mission specific data for a data handling device for subsequent transfer to the weapon.		
SLAM_FRD-2947	03-01 F/A-18 Management The SLAM UPC mission data shall contain the SLAM OFP version.		
SLAM_FRD-2948	03-01 F/A-18 Management The SLAM UPC shall interface with the F/A-18 MPM Data Storage Unit (DSU) preprocessor software.		
SLAM_FRD-2949	03-01 F/A-18 Management "The F/A-18 preprocessor shall be responsible for inserting GPS crypto keys (red, black, and Black Key Algorithm Update Parameter), updating file checksums in the SLAM Bulk Data File (BDF), and deleting all temporary files containing GPS keys."		
SLAM_FRD-2950	03-01 F/A-18 Management The F/A-18 preprocessor shall update the SLAM Bulk Data File with the most current (but no older than 1 week) GPS almanac available from JMPS.		
SLAM_FRD-2951	03-01 F/A-18 Management The F/A-18 preprocessor may update the GPS almanac data and Bulk Data Index information through the Common Weapon Build Data file.		
SLAM_FRD-2952	03-01 F/A-18 Management "The F/A-18 preprocessor shall provide the capability to download multiple tagsets, assign tagsets to SLAM wing stations and assign the data link channels."		